

REMARKS

Applicant has reviewed and considered the Office Action mailed on December 15, 2006, and the references cited therein.

Claims 1, 4-5, 9-10, 17, 19, and 21-22 are amended and claims 25-30 are canceled; as a result, claims 1-24 are now pending in this application.

35 USC§103 Rejection of the Claims

Claims 1-3, 6, 9, and 14-18 were rejected under 35 USC § 103(a) as being unpatentable over *Wright et al.* (U.S. Patent 6,173,159) in view of *Khullar* (U.S. Publication 2002/0154611).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP § 2142

With regard to claim 1, the Examiner takes the position that no limitation in claim 1 would allow the Examiner to construe the claim language as an open loop method. The Applicants respectfully disagree. Claim 1 calculates a link margin of a wireless device using a power level of a signal received by the wireless device and a receiver sensitivity indication. Claim 1 then adjusts the transmit data rate of the wireless device based on the calculated link margin. No link margin related feedback is needed from a receiving device. Neither *Wright et al.* nor *Khullar* disclose or suggest, either alone or in combination, calculating a link margin for a wireless device using a power level of a signal received by the wireless device and a receiver sensitivity indication; and then adjusting a transmit data rate of the same wireless device based on the calculated link margin. *Wright et al.* simply discloses an equation for link margin that is used in an analysis to determine communication range for an air-to-ground link (see column 20, lines 1-3 of *Wright et al.*). *Khullar* discloses selecting a new transmission scheme for a transmitting device to achieve at least the same link margin that existed before a reduction in transmit power, but it does not disclose or suggest calculating a link margin for the transmitting device using a power level of a signal received by the transmitting device and then using this

calculated link margin to adjust the transmit data rate of the same transmitting device. Therefore, the combination of references cited by the Examiner does not teach or suggest all of the claim limitations of claim 1 as required to establish a prima facie case of obviousness.

Based on the foregoing, it is submitted that a prima facie case of obviousness has not been established with respect to claim 1. Reconsideration and allowance of claim 1 is therefore respectfully requested. A similar argument applies to claim 17.

With regard to claim 9, a similar argument applies. Claim 9 is directed to a wireless device that includes (a) a wireless transceiver; (b) a link margin determination unit to determine a link margin associated with the wireless transceiver using a power level of a signal received by the wireless transceiver; and (c) a transmit data rate determination unit to select a transmit data rate for the wireless transceiver based on said link margin determined by said link margin determination unit. Neither Wright et al. nor Khullar disclose or suggest, either alone or in combination, a wireless device that includes such a link margin determination unit and transmit data rate determination unit within the same device where the transmit data rate determination unit selects a transmit data rate based on a link margin determined by the link margin determination unit.

Based on the foregoing, it is submitted that a prima facie case of obviousness has not been established with respect to claim 9. Reconsideration and allowance of claim 9 is therefore respectfully requested.

Claims 2-3 and 6, claims 14-16, and claim 18 are dependent claims that depend either directly or indirectly from independent claims 1, 9, and 17, respectively. Consequently, these claims are allowable for at least the same reasons as their corresponding base claims.

Claims 4, 10, and 19 were rejected under 35 USC § 103(a) as being unpatentable over *Wright et al.* (U.S. Patent 6,173,159) as modified by *Khullar* (U.S. Publication 2002/0154611) as applied to claims above, and further in view of *Shvodian* (U.S. Publication 2003/0003905).

Claims 4, 10, and 19 are dependent claims that depend directly from independent claims 1, 9, and 17, respectively. Consequently, these claims are allowable for at least the same reasons as their corresponding base claims. These claims also provide further bases for patentability. For example, claim 4 further defines “adjusting” of claim 1 as including “selecting a transmit data rate by determining which of a plurality of ranges said link margin falls within, wherein

each range in said plurality of ranges corresponds to a different transmit data rate.” Neither Wright et al, Khullar, or Shvodian, either alone or in combination, disclose or suggest a plurality of link margin ranges that each correspond to a different transmit data rate. A similar argument applies to claims 10 and 19. It should be noted that Shvodian discloses yet another example of a closed loop technique.

Claims 5, 13, and 20 were rejected under 35 USC § 103(a) as being unpatentable over *Wright et al.* (U.S. Patent 6,173,159) as modified by *Khullar* (U.S. Publication 2002/0154611) as applied to claims above, and further in view of *Walton et al.* (U.S. Publication 2003/0013451).

Claims 5, 13, and 20 are dependent claims that depend either directly or indirectly from independent claims 1, 9, and 17, respectively. Consequently, these claims are allowable for at least the same reasons as their respective base claims.

Claim 7 was rejected under 35 USC § 103(a) as being unpatentable over *Wright et al.* (U.S. Patent 6,173,159) and *Khullar* (U.S. Publication 2002/0154611) as applied to claims above, and further in view of *Klein et al.* (U.S. Publication 2003/0100328).

Claim 7 is a dependent claim that depends indirectly from independent claim 1. Consequently, claim 7 is allowable for at least the same reasons as claim 1.

Claims 21 and 24 were rejected under 35 USC § 103(a) as being unpatentable over *Wright et al.* (U.S. Patent 6,173,159) in view of *Khullar* (U.S. Publication 2002/0154611) and further in view of *Durham et al.* (U.S. Publication 2005/0030244)

Independent claim 21 is allowable for at least the same reasons as claim 1 discussed above.

Claim 24 is a dependent claim that depends directly from independent claim 21. Consequently, claim 24 is allowable for at least the same reasons as claim 21.

Claims 22 and 23 were rejected under 35 USC § 103(a) as being unpatentable over *Wright et al.* (U.S. Patent 6,173,159), *Khullar* (U.S. Publication 2002/0154611), and *Durham* (U.S. Publication 2005/0030244) as applied to claims above, and further in view of *Shvodian* (U.S. Publication 2003/0003905).

Claims 22 and 23 are dependent claims that depend directly from independent claim 21. Consequently, these claims are allowable for at least the same reasons as claim 21. These claims

also provide further basis for patentability. For example, claim 22 is allowable for reasons similar to claim 4 described above.

Claim 25 was rejected under 35 USC § 103(a) as being unpatentable over *Khullar* (U.S. Publication 2002/0154611) in view of *Walton* (U.S. Publication 2003/0013451).

Claim 25 has been cancelled herein without prejudice or disclaimer.

Claims 26, 27, and 28 were rejected under 35 USC § 103(a) as being unpatentable over *Khullar* (U.S. Publication 2002/0154611) in view of *Walton* (U.S. Publication 2003/0013451).

Claims 26, 27, and 28 have been cancelled herein without prejudice or disclaimer.

Claims 29 and 30 were rejected under 35 USC § 103(a) as being unpatentable over *Khullar* (U.S. Publication 2002/0154611), in view of *Walton* (U.S. Publication 2003/0013451) as applied to claims above, and further in view of *Belcea* (U.S. Patent 6,904,021).

Claims 29 and 30 have been cancelled herein without prejudice or disclaimer.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (480-948-3745) to facilitate prosecution of this application.

Respectfully submitted,

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By their Representatives,

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480-948-3745

Date: February 12, 2007

By

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 12th day of February, 2007.

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